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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,426	01/14/2002	Akihiko Morikawa	215056US0PCT	2427

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13  
EXAMINER

MULLIS, JEFFREY C

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 08/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/926,426

Applicant(s)

MORIKAWA ET AL.

Examiner

Jeffrey C. Mullis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Japanese Patent 6-73222 has been crossed out and not considered since no concise explanation has been provided as required for foreign language references. It is noted that an Abstract is attached to the patent but the Abstract does not correspond to the patent.

Claim 4 contains the ungrammatical "a" insoluble. Correction is required.

Applicants' specification contains a vast number of references to the claims. This is improper since, firstly the purpose of the specification is to illuminate the claims, not the other way around. Secondly, any material which is present in the claims must be in the specification and is therefore not proper to merely refer to the claims rather than providing a disclosure in the specification. Applicants are required to remove all reference to the claims in the specification and to insert all subject matter present in the claims not previously present into the specification. Examples of places where the specification refers to the claims is in the first complete paragraph on page 4, the paragraph bridging pages 4 and 5, the paragraph bridging pages 5 and 6, the last complete paragraph on page 6, the first complete paragraph on page 6, the paragraph bridging pages 7 and 8, etc, etc.

Claims 7-9 and 11-13 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not

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described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as filed does not disclose how to produce the block copolymers recited by claims 7-9 in which one block has a different 1,2 vinyl group content than the other block, i.e. in which the vinyl group content in block A is less than 25 mole percent and the vinyl group content in B is not less than 25% by mole. Claims 7-9 are therefore not supported by an adequate written description and are not enabled.

Claims 6-9 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

It is not clear what is intended by the recitation in the third line of claim 7 where it is stated "those represented by A shown below" in that nothing is shown below in claim 7. Furthermore it is not clear what is intended by "group content lower than that in B shown below" in that nothing is shown below.

It is not clear what is intended by applicants' conjugated polymeric block B for the particular 1,2 vinyl group content in that it is recited in claim 7 that the block B may be a vinyl aromatic block such as is incapable of giving anything but 1,2 addition and furthermore the 1,2 vinyl group content as generally

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recited in the art refers to dienes, not vinyl aromatic compounds. It is therefore unclear if the 1,2 vinyl group content refers merely to the diene units or also pertains to the vinyl aromatic compound units.

It is not clear what is intended by "crystalline ethylenic polymeric blocks" in that the term "ethylenic" may alternatively be interpreted as derived from polymerization of ethylene or may be interpreted as merely broadly the polymerization of an unsaturated group.

It is noted that the term "ethylenic polymeric block" appears also in claims 11 and 13 and these claims are therefore also unclear for the reasons set out above.

With regard to the term "polyethylenic resin" as recited in the claims, it is clear from reading applicants' specification that applicants intend resins derived by polymerization of ethylene, i.e.  $C_2H_4$  and do not broadly embrace mere polymers which are merely derived from any ethylenic unsaturated material as set out in the paragraph bridging pages 5 and 6 of applicants' specification which discloses that the crystalline polyethylenic resin 2 contains ethylene as a main component. However no definition of applicants' "crystalline ethylenic polymer block" appears to be present in the specification.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Itoh et al., USP 5,596,042, cited by applicants.

Itoh et al. disclose a composition containing a crystalline polyolefin resin such as a propylene/ethylene copolymer, an ethylene/propylene/5-ethylidene-2-norbornene copolymer rubber and a block copolymer which is prepared by kneading these three components with dicumyl peroxide and divinyl benzene such as those skilled in the art would understand would act as a cross-linking agent. Note Examples 5 and 6 in this regard.

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Since a cross-linked structure contains linkages between the backbones of the polymeric components and since the composition exists in three dimensional space, a cross-linked structure can be said to be a three dimensional network structure and therefore applicants' limitation that the crystalline polyethylenic resin "is in a three-dimensional network structure in a matrix comprising said ethylene alphaolefinic copolymer" reasonably appears to be inherent.

When the reference discloses all the limitations of a claim except a property or function, and the Examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention, basis exists for shifting the burden of proof to applicant. Note In re Fitzgerald et al. 619 F. 2d 67, 70, 205 USPQ 594, 596, (CCPA 1980). See MPEP § 2112-2112.02.

Claims 1-4, 10 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Shibayama et al. (USP 5,543,438).

Shibayama et al. discloses a foam composition containing a polyethylene and an ethylene propylene copolymer and a cross-linking agent. Note Examples 11-15 and column 19.

Claims 1-4, 10 and 12 are rejected under 35 U.S.C. § 102(b) as being anticipated by Miyamoto et al. (USP 4,366,464).

Miyamoto et al. disclose an insulating layer composition composed of polyethylene and an olefin polymer which is

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cross-linked. Note the Abstract and column 3 lines 10-16. Note Table 2 containing the Examples showing that the composition is cross-linked and therefore present in the form of a three-dimensional structure. The material is present as a foam at column 7 lines 21-24.

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and *In re Goodman*, 29 USPQ 2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4, 10 and 12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of copending application Serial No. 10/009,492. Although the conflicting claims are not identical, they are not patentably distinct from each other because choice of the species of the one application over the other would have been obvious to a practitioner having ordinary skill in the art at the time of the invention and in the



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expectation of adequate results in that all species are expected to work absent any showing of surprising or unexpected results.

This is a *provisional* obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Mullis whose telephone number is (703) 308-2820. The examiner can normally be reached on Monday-Friday from 9:30 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for this Group is before final (703) 872-9310 and after final (703) 8729311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

J. Mullis:cdc

August 5, 2003

Jeffrey Mullis  
Primary Examiner  
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